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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,429	07/16/2002	Peter Carlo Rem	6900-14	9130

7590 10/07/2004

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EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT PAPER NUMBER

3653

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/088,429	<b>Applicant(s)</b> REM ET AL.	
	<b>Examiner</b> Joseph C Rodriguez	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

***Final Rejection***

Applicant's arguments filed 6/30/2004 have been fully considered but they are not persuasive for reasons detailed below.

The 35 U.S.C. 112 rejections are maintained or modified as follows:

These rejections have been withdrawn.

The prior art rejections are maintained or modified as follows:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-13 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Heyman (US 2,708,032).

Heyman teaches a device (Fig. 1-3) comprising a separation chamber (8) with a supply opening (left of 18), discharge openings (near 10), a particle restraining element possessing passages (7) angled as claimed (Fig. 1), and a means for moving a fluid medium up or down (13; col. 3, ln. 55 et seq.). Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here,

Heyman's device is certainly capable of separating articles of a specific gravity lower than the fluid medium as the restraining element will separate these articles when the fluid medium containing particles are subjected to an up and down movement.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyman in view of Siebert (DE '726) and Farahmand (GB 2 078 138 A).

Heyman (Fig. 3; col. 2, ln. 56 et seq.) teaches all that is claimed except for expressly teaching the separation of particles, such as plastic and polyolefines, having a density lighter than the fluid medium, wherein said fluid medium is a specific temperature. Farahmand, however, expressly teaches using the lower density of plastic particles to separate said particles in a denser fluid medium using a device similar to Heyman's (p. 1, ln. 47-p.2, ln. 42). Siebert also expressly teaches the sorting of plastic and polyolefines that applies specific temperatures to the plastics to enhance density differences between the plastics, thus allowing an easier separation (Abstract). Moreover, Siebert teaches that economic benefits can be achieved by using this method to process plastics (Id.). Further, the recovery of low-density plastics is a valuable benefit (Farahmand, p. 1), thus one would have ample motivation to utilize

Heyman's separator in this field. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Heyman to separate plastics of varying densities using different temperatures to achieve cost savings.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyman in view of Siebert (DE '726) and Farahmand (GB 2 078 138 A) as applied to claims 1-6 and 9-11 above, and further in view of Yang et al. ("Yang")(US '910).

Heyman in view of Siebert and Saitoh as set forth above teach all that is claimed except for expressly teaching using discharge-facilitating particles having a specific density. Yang, however, teaches the use of discharge-facilitating particles having the claimed specific density that also enhance the particle separation efficiency (col. 3, ln. 2 et seq.). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Heyman as taught above to increase the separation efficiency.

Applicant's argument that the cited prior art fails to teach the features of the claimed invention is unpersuasive. Here, it is noted that Applicant's is primarily arguing for features that are not even in the body of the claim. That is, the bulk of Applicant's limitations regarding the concept of "a fluid medium having a higher density" reside in the preamble, thus these limitations are entitled to little patentable weight. For instance, it is unclear in claim 1 how the density concept is part of the claimed method steps.

Examiner recommends amending the claims by placing critical elements in the body of the claim and to include features that clearly define over the prior art.

Examiner has maintained the prior art rejections, statutory rejections and drawing objections as previously stated and as modified above. Applicant's amendment necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### ***Election/Restrictions***

This application contains claims 14-20 are drawn to an invention nonelected with traverse in Paper No. 11. A complete reply to the final rejection must include

cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is **703-308-8342**. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).

The **UnOfficial** fax phone number for the organization where this application or proceeding is assigned is **703-306-2571** or **703-308-6552**.

The examiner's **UNOFFICIAL Personal fax number** is **703-746-3678**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

**<http://pair-direct.uspto.gov>**


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Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at 866-217-9197 (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **703-308-1113**.

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September 30, 2004

  
DONALD P. WALS  
SUPERVISORY PATENT EXAMINER  
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